

**PROCESS FOR PRODUCING CATALYSTS WITH REDUCED  
HYDROGENATION ACTIVITY AND USE THEREOF**

**ABSTRACT**

A process for controlling the hydrogenation activity of a catalyst comprised of a crystalline molecular sieve and at least one hydrogenation metal selected from the group consisting of a Group VIIB metal, a Group VIII metal, and mixtures thereof. The process is carried out by contacting the catalyst with hydrogen under sufficient conditions of temperature and pressure and for sufficient time to reduce the hydrogenolysis activity of the catalyst. The catalyst prepared by the process finds application in the catalytic conversion of organic compounds, such as ethylbenzene dealkylation, xylenes isomerization, and the transalkylation of polyalkylaromatic hydrocarbons.